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10/001,730	11/02/2001	Kevin A. Seiling	01-180	2670

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EXAMINER
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KUHNS, ALLAN R

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 03/17/2006

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Application Number: 10/001,730  
Filing Date: November 02, 2001  
Appellant(s): SEILING ET AL.

MAILED  
MAR 17 2006  
GROUP 1700

Frederick L. Tolhurst  
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 22, 2005 appealing from the  
Office action mailed February 9, 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

WO 00/03859	NOMURA et al.	1-2000
6,062,624	CRABTREE et al.	5-2000

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 5 and 18-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO00/03859 (Nomura et al.) in view of Crabtree et al. (6,062,624). Nomura et al. (6,623,838) is being used as a translation/English equivalent of the '859 document. Nomura et al. disclose or suggest the basic claimed composition or structure including polymer material selected from the group consisting of polyvinyl chloride, polyethylene and polypropylene (column 11, lines 13-22) in a concentration of 82-99% by weight of the mixture and glass fibers that are embedded in the polymer material, the glass fibers having a fiber length in the range of 50 to 900 microns (column 4, lines 5-7) and being in an amount of 1-18% by weight of the composition (column 3, lines 63-64). One application for the structure of Nomura et al. is use as "car parts such as in panel cores (column 16, line 9). Nomura et al. state at column 8, lines 66-67 that the moldings they produce "have an open cellular structure" while the instant claims require "internal closed cells". However, Crabtree et al. describe structures of polymeric foam material (including foamed polyvinyl chloride at column 3, lines 58-59) which are also used as in panel cores or a filling for a cavity or pillar or other body member of an automobile, and it is stated by Crabtree et al. at column 3, lines 52-53 that the foam material may be either open or closed cell. Given this teaching of Crabtree et al., it would have been obvious to one of ordinary skill in the art to form the structure of Nomura et al. with either open or closed cells since Crabtree et al. teach that either

open or closed cellular material is appropriate for use to fill cavities in a body member of an automobile.

In claim 1, it is stated that the product or composition is "extruded" and in claim 18 the product or composition is recited with several process steps. The instantly claimed product or composition is being evaluated as set forth in MPEP 2113. This MPEP section requires that the patentability of a product not depend on its method of production, but rather the determination of patentability must be based on the product (structure) itself.

Nomura et al. also disclose the use of polyvinyl chloride (column 11, line 18), as in claim 18, and the use of glass fibers having a diameter within the range of claim 3 (column 12, line 13). It is submitted that the glass fibers of Nomura et al. meet the physical property limitations of claims 2 and 5, given that those fibers meet that composition (i.e., glass), length and diameter limitations of these claims. Nomura et al. also teach or suggest the use of blowing agents, as in claims 19-28, in the disclosure at column 15, lines 1-39.

#### **(10) Response to Argument**

Appellants argue that claim 1 is patentable over the Nomura and Crabtree references because it requires "a polymer material extruded to have internal closed cells" in combination with "glass fibers that are imbedded in the closed cell polymer material" and that have "a fiber length in the range of 50 to 900 microns". This is not persuasive because Nomura et al. teach the use of fibers having a length within this claimed range at column 4, lines 5-7, and Crabtree et al. provide motivation for one of

ordinary skill in the art to form the polymeric material in either open or closed cellular form. Regarding the material being “extruded”, the examiner has evaluated the instantly claimed composition or product in accordance with MPEP 2113.

In a discussion specifically directed to the teachings of the Nomura reference, Appellants describe many of the “process” steps conducted by Nomura et al. But, as stated previously, the claims at issue have been evaluated according to MPEP 2113. Appellants do argue that Nomura actually teaches away from closed cell polymer materials since the moldings of Nomura et al. are said to have an “open cellular structure”. But Crabtree et al. provide motivation for one of ordinary skill in the art to form the structure in either open or closed cellular form, as described previously.

Appellants also argue that even though Nomura et al. teach the use of glass fibers, those glass fibers are generally much longer than the 50–900 micron range of claim 1. This is not persuasive because Nomura et al. do teach the use of fibers having a length within the claimed range.

Appellants further assert that it has been found that fiber length in the 50-900 micron range of claim 1 affords preferred qualities of weathering, appearance and strength in the closed cell polymer product. In support of this assertion, Appellants refer to the declarations of Jerry. J. Sutch and Douglas M. Pennington filed April 22, 2004. But these declarations were not and are not commensurate in scope with the claims at issue as the instant claims are not limited with regard to the weathering, appearance or strength of the composition or product.

Appellants also present arguments relating to the fact that much of the range of fiber lengths taught by Nomura et al. lies outside of that instantly claimed. This is not persuasive because Nomura et al. do teach the use of fibers with a length within the instantly claimed range.

Appellants also argue that even though a claimed invention falls within a range that is disclosed in the prior art, the claimed invention is still patentable if (1) the prior art taught away from the claimed invention or (2) the invention affords new and unexpected results relative to the prior art. Clearly there is an already documented disagreement between Appellants and the examiner with respect to whether the prior art relied upon teaches away from the claimed invention. In addition, it is not clear from reviewing the instant specification and the declarations of Sutch and Pennington what quantifiable unexpected results ensued from the use of glass fibers having a length of between 50-900 microns. Both of the declarations (of Sutch and Pennington) simply state that use of glass fibers typically of a length ranging between 2500 to 3500 micrometers produced "unsatisfactory results" (Sutch Para. 8) or a product that "did not have the desired properties" (Pennington Para. 9) while the use of glass fibers having a length of between about 50-900 micrometers produced a product with the "desired strength" as well as other preferred characteristics related to appearance and weathering (Sutch Para. 9 and Pennington Para. 10).

Appellants acknowledge that the foamed material of Crabtree et al. can be either open cell or closed cell and view this disclosure as being "indifferent as to cell structure for the acoustic foaming material". But, to the examiner, what Appellants view as

indifference of Crabtree et al. as to cell structure is actually at least a strong suggestion to one of ordinary skill in the art that the in panel cores of Nomura et al. may be appropriately formed of either a closed cell or open cell structure.

Appellants further argue that Nomura and Crabtree are non-analogous art and their combination with respect to claim 1 is improper. But the examiner has pointed out a particular passage (column 16, line 9) that indicates that the two references should be viewed as analogous art.

Appellants also argue that the Official Action attempts to ignore the express teachings of Nomura and combine Nomura, which require an open cell material and relatively long glass fibers, with the closed cell fibreless material of Crabtree. But Crabtree actually provides motivation for one of ordinary skill in the art to produce either an open cell or closed cell material, and it appears to the examiner that Appellants are attempting to ignore an express teaching of Nomura since this reference teaches the use of glass fibers having a length within the instantly claimed range.

Appellants also question the combining of the Nomura and Crabtree references by stating that (1) claim 1 cannot be made unpatentable by modifying or combining the references in accordance with Appellant's own teachings, and (2) when combining references, there must be a suggestion or teaching (in the prior art) to those skilled in the art for such a combination. But the examiner did not use Appellants' own teachings as a basis for combining Nomura with Crabtree because the Crabtree reference itself teaches one of ordinary skill in the art that in panel cores for car parts can be made from either open cell or closed cell material. Thus, the motivation for combining the two

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references comes from the Crabtree reference itself and is not a hindsight reconstruction based on Appellants' disclosure. Based on the same reasoning, the proposed combination of references is not relying on an impermissible "obvious to try" standard.

Appellants' arguments in support of independent claim 18 appear to be based on substantially the same reasoning as that applied to claim 1. In addition, Appellants argue that claims 2, 3 and 5 are patentable for the same reasons that claim 1 is patentable and that claims 19-28 are patentable for the reasons that claim 18 is patentable.

**(11) Related Proceeding(s) Appendix**

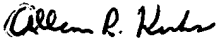
No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

The Form PTO-1449, filed September 12, 2005, has been initialed by the examiner and is attached hereto.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Allan R. Kuhns

  
ALLAN R. KUHNS  
PRIMARY EXAMINER AU 1732  
3-13-06

Conferees:

Michael Colaianni



  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

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Roy King